[6450-01-P]

DEPARTMENT OF ENERGY

10 CFR Parts 429 and 430

[Docket No. EERE-2011-BT-TP-0061]

RIN: 1904-AC65

Energy Conservation Program for Consumer Products and Certain Commercial and Industrial Equipment: Test Procedures for Showerheads, Faucets, Water Closets, Urinals, and Commercial Prerinse Spray Valves

AGENCY: Office of Energy Efficiency and Renewable Energy, Department of Energy.

ACTION: Supplemental notice of proposed rulemaking.

SUMMARY: The U.S. Department of Energy (DOE) proposes amendments to its May 2012 notice of proposed rulemaking related to DOE test procedures for showerheads, faucets, water closets, urinals, and commercial prerinse spray valves. The amendments proposed in this supplemental notice of proposed rulemaking include revisions to the definitions of showerhead and hand-held showerhead; removal of body sprays from the proposed showerhead definition; requirements pertaining to testing of showerheads that are components of shower towers; a standardized test method to be used when verifying the mechanical retention of a showerhead flow control insert when subjected to 8 pounds force; clarification of permissible trim

adjustments for tank-type water closets; and amendments to the required static test pressures to be used when testing flushometer valve siphonic and blowout water closets. DOE also proposes further clarification of the definition of basic model with respect to flushometer valve water closets and urinals, as well as associated changes to certification reporting requirements for these products.

DATES: DOE will accept comments, data, and information regarding this SNOPR no later than **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. See section IV, "Public Participation," for details.

ADDRESSES: Interested parties may submit comments, identified by docket number EERE-2011-BT-TP-0061 or Regulation Identifier Number (RIN) 1904-AC65, by any of the following methods:

1. Federal eRulemaking Portal: http://www.regulations.gov. Follow the instructions for submitting comments.
2. Email: PlumbingPrds-2011-TP-0061@ee.doe.gov. Include the docket number and/or RIN in the subject line of the message.
3. Mail: Ms. Brenda Edwards, U.S. Department of Energy, Building Technologies Program, Mailstop EE-2J, 1000 Independence Avenue, SW., Washington, DC 20585-0121. If possible, please submit all items on a CD. It is not necessary to include printed copies.
4. Hand Delivery/Courier: Ms. Brenda Edwards, U.S. Department of Energy, Building Technologies Program, 950 L'Enfant Plaza, SW., Suite 600, Washington, DC 20024.

Telephone: (202) 586-2945. If possible, please submit all items on a CD. It is not necessary to include printed copies.

For detailed instructions on submitting comments and additional information on the rulemaking process, see section IV of this document ("Public Participation").

Docket: The docket, including Federal Register notices, public meeting attendee lists and transcripts, comments, and other supporting documents/materials, is available for review at regulations.gov. All documents in the docket are listed in the regulations.gov index. However, not all documents listed in the index may be publicly available, such as information that is exempt from public disclosure.

A link to the docket web page can be found at: http://www.regulations.gov/#!docketDetail;dct=FR%252BPR%252BN%252BO%252BSR%252BPS;rpp=10;po=0;D=EERE-2011-BT-TP-0061. This web page will contain a link to the docket for this notice on the regulations.gov site. The regulations.gov web page will contain simple instructions on how to access all documents, including public comments, in the docket. See section IV, "Public Participation," for information on how to submit comments through regulations.gov.

For further information on how to submit a comment, review other public comments and the docket, contact Ms. Brenda Edwards at (202) 586-2945 or by email: Brenda.Edwards@ee.doe.gov.

FOR FURTHER INFORMATION CONTACT:

Mr. Lucas Adin, U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Building Technologies Program, EE-2J, 1000 Independence Avenue, SW., Washington, DC 20585-0121. Telephone: (202) 287-1317. Email: Lucas.Adin@ee.doe.gov.

Ms. Jennifer Tiedeman, U.S. Department of Energy, Office of the General Counsel, GC-71, 1000 Independence Avenue, SW., Washington, DC 20585-0121. Telephone: (202) 287-6111. Email: Jennifer.Tiedeman@hq.doe.gov.

SUPPLEMENTARY INFORMATION:

I. Background and Authority

A. Authority

Title III, Part B of the Energy Policy and Conservation Act of 1975 (EPCA), Pub. L. 94-163 (42 U.S.C. 6291-6309, as codified), established the Energy Conservation Program for Consumer Products Other Than Automobiles, which includes the showerheads, faucets, water closets, and urinals that are the subjects of today's notice.[1]

Under EPCA, this program consists essentially of four parts: (1) testing, (2) labeling, (3) Federal energy and water conservation standards, and (4) certification and enforcement procedures. The testing requirements include test procedures that manufacturers of covered products must use as the basis for (1) certifying to the DOE that their products comply with applicable energy and water conservation standards adopted under EPCA and (2) making representations about the energy or water consumption of those products on labels and other materials. Similarly, DOE must use these test procedures to determine whether the products comply with any relevant standards promulgated under EPCA.

B. Background

EPCA states that the procedures for testing and measuring the water use of faucets and showerheads shall be American Society of Mechanical Engineers (ASME) Standard A112.18.1M-1989, "Plumbing Fixture Fittings," and the test procedure for water closets and

[1] For editorial reasons, upon codification in the U.S. Code, Part B was redesignated Part A.

urinals shall be ASME Standard A112.19.6-1990, "Hydraulic Requirements for Water Closets and Urinals." EPCA further specifies that if ASME revises these requirements, the Secretary of Energy (Secretary) shall adopt such revisions if they conform to the basic statutory requirements for test procedures. (42 U.S.C. 6293(b)(7)–(8)) DOE last amended test procedures for these products in a final rule published in March 1998 (March 1998 final rule), which incorporated by reference ASME Standard A112.18.1M-1996, "Plumbing Fixture Fittings," for showerheads and faucets, and ASME Standard A112.19.6-1995, "Hydraulic Performance Requirements for Water Closets and Urinals," for water closets and urinals. 63 FR 13308 (March 18, 1998). Since publication of the March 1998 final rule, ASME has revised both procedures and harmonized them with the corresponding standards of the Canadian Standards Association (CSA). ASME and CSA issued the most recent version for showerheads and faucets in June 2011 as ASME A112.18.1-2011/CSA B125.1-11, "Plumbing Supply Fittings," and issued the most recent version for water closets and urinals in August 2008 as ASME A112.19.2-2008/CSA B45.1-08, "Ceramic Plumbing Fixtures." These standards are referred to in this notice as ASME A112.18.1-2011 and ASME A112.19.2-2008, respectively.

On May 30, 2012, DOE issued a notice of proposed rulemaking (the May 2012 NOPR) proposing to amend the test procedures for showerheads, faucets, water closets, and urinals to incorporate by reference, with the exception of certain provisions regarding rounding of measured values, ASME A112.18.1-2011 and ASME A112.19.2-2008. 77 FR 31742, 31744. DOE also proposed to update its reference to the latest version of the ASTM International (ASTM) standard for commercial prerinse spray valves by incorporating by reference ASTM Standard F2324-03 (2009), "Standard Test Method for Prerinse Spray Valves." 77 FR at 31744.

In the May 2012 NOPR, DOE also proposed additional provisions, including test procedures for measuring representative average flush volume for dual-flush water closets; requested comments on the standardized test method for showerhead flow control insert retention requirement; proposed definitions related to showerheads, body sprays, and hand-held showerheads; and proposed clarifications to the basic model definition with respect to water closets and urinals. 77 FR at 31746–31748.

In response to DOE's proposed test procedure amendments, as presented in the May 2012 NOPR, several interested parties provided comments. DOE has considered all submitted comments and conducted additional analyses in preparation of a revised proposal to amend the test procedures for showerheads, faucets, water closets, and urinals, as presented in this supplemental notice of proposed rulemaking (SNOPR). A more detailed discussion of the comments received and DOE's response is provided in section II, "Discussion." This SNOPR addresses only proposed modifications to its earlier proposal and those comments received in response to the NOPR that are relevant to the proposed changes. All other comments received regarding the May 2012 NOPR will be addressed in the test procedure final rule.

In this SNOPR, DOE proposes to revise the definitions of showerhead and hand-held showerhead; proposes to remove body sprays from the definition of the term showerhead proposed in the NOPR; proposes a standardized test method for the mechanical retention of a showerhead flow control insert when subjected to 8 pounds force (lbf); provides clarification of allowable trim adjustments for gravity flush tank water closets; and proposes amendments to the required static test pressures when testing flushometer valve siphonic and blowout water closets.

DOE also proposes further clarification of the definition of basic model with respect to flushometer water closets and urinals, as well as associated changes to certification reporting requirements, including specific provisions regarding the testing and reporting of dual-flush water closets.

C. General Test Procedure Rulemaking Process

In 42 U.S.C. 6293, EPCA sets forth the criteria and procedures DOE must follow when prescribing or amending test procedures for covered products. EPCA provides, in relevant part, that any test procedures prescribed or amended under this section shall be reasonably designed to produce test results that measure energy efficiency, energy use, water use (in the case of showerheads, faucets, water closets, and urinals), or estimated annual operating cost of a covered product during a representative average use cycle or period of use and shall not be unduly burdensome to conduct. (42 U.S.C. 6293(b)(3))

In addition, if DOE determines that a test procedure amendment is warranted, it must publish proposed test procedures and offer the public an opportunity to present oral and written comments on them. (42 U.S.C. 6293(b)(2)) Finally, in any rulemaking to amend test procedures, DOE must determine to what extent, if any, the proposed test procedures would alter the measured energy efficiency of any covered product as determined under the existing test procedures. (42 U.S.C. 6293(e)(1)) If DOE determines that the amended test procedures would alter the measured efficiency of a covered product, DOE must amend the applicable energy conservation standard accordingly. (42 U.S.C. 6293(e)(2))

Any representation as to the water consumption of the products that are the subjects of this rulemaking made 180 days after the date of publication of an amended test procedure final rule must be based upon results generated under the applicable provisions of any amended test procedures. (42 U.S.C. 6293(c)(2)) However, the 180 day period may be extended for an additional 180 days if the Secretary determines that this requirement would impose an undue burden. (42 U.S.C. 6293(c)(3)) Upon the compliance date(s) of any amended water conservation standard(s) for faucets and showerheads, use of the applicable provisions of the amended test procedures to demonstrate compliance with the water conservation standard(s) will also be required.

II. Discussion

On July 24, 2012, DOE held a public meeting to discuss proposed amendments to the test procedures for showerheads, faucets, water closets, and urinals presented in the May 2012 NOPR. During the public meeting, and in subsequent written comments, interested parties provided DOE with feedback on the proposed test procedure amendments. These comments are available for viewing in the public docket for this rulemaking (Docket No. EERE-2011-BT-TP-0061). Comments from interested parties addressed in this SNOPR involve the following issues:

1. DOE's definitions of showerhead, body spray, and hand-held shower;
2. test procedure requirements for showerhead flow control insert retention;
3. the definition of basic model with respect to water closets and urinals;
4. trim adjustments for gravity flush tank water closets;

5. static pressures for testing of flushometer valve siphonic and blowout water closets; and
6. testing and reporting of dual-flush water closets.

Specific comments received from interested parties and DOE's responses are set forth in sections II.A and II.B of this document.

A. DOE Test Procedures for Plumbing Products

1. Definitions

In the May 2012 NOPR, DOE proposed a modification to the definition of "showerhead" based on the definition in ASME A112.18.1-2011. DOE's proposed definition in the May 2012 NOPR stated that a "showerhead means an accessory, or set of accessories, to a supply fitting distributed in commerce for attachment to a single supply fitting, for spraying water onto a bather, typically from an overhead position, including body sprays and hand-held showers, but excluding safety showerheads." 77 FR at 31755. DOE proposed this modified form of the ASME definition to more clearly define the extent of DOE's coverage of these products, and to clarify that safety shower showerheads are not covered products, and that hand-held showerheads are covered.

In response, Kohler Company (Kohler) and Sloan Valve Company (Sloan Valve) recommended that, for consistency with the ASME standard, DOE should use the showerhead definition found in ASME A112.18.1-2011: "An accessory to a supply fitting for spraying water onto a bather, typically from the overhead position." (Kohler, No. 9 at p. 4 Sloan Valve, No. 12

at p. 3) The National Resources Defense Council (NRDC) commented that a showerhead should not be defined as an accessory. (NRDC, Public Meeting Transcript, No. 11 at pp. 54–55)

Comments submitted by Plumbing Manufacturers International (PMI), Moen Incorporated (Moen), and Kohler stated that body sprays should not be included in the definition of showerhead because body sprays are not considered accessories since they cannot be readily added or removed by the user. (PMI, No. 8 at p. 4; Moen, No. 4 at p. 3; Kohler, No. 9 at p. 4) On the contrary, NRDC supported the incorporation of body sprays in the showerhead definition. (NRDC, Public Meeting Transcript, No. 11 at pp. 57–58) The International Code Council (ICC) supported DOE's proposed showerhead definition and recommended that the term "showerhead" be incorporated in the definition of body spray to clearly indicate that body sprays are considered a form of showerhead. (ICC, Public Meeting Transcript, No. 11 at pp. 55–56)

DOE has determined that the current ASME showerhead definition, recommended by Kohler and Sloan, does not sufficiently address DOE's regulatory coverage of showerheads by not specifically including hand-held showerheads or excluding safety shower showerheads. Further, although in the NOPR DOE sought to clarify that body sprays are showerheads for purposes of regulatory coverage, in light of the concerns that some commenters have raised regarding the proposal and DOE's need to further study the issue, DOE withdraws its proposal to include body sprays in the showerhead definition at this time. Additionally, based on consideration of the comments received, DOE proposes in this SNOPR to exclude the term "accessory" from the definition of showerhead, and proposes to define "showerhead" as follows: "A component of a supply fitting, or set of components distributed in commerce for attachment

to a single supply fitting, for spraying water onto a bather, typically from an overhead position, including hand-held showerheads, but excluding safety shower showerheads."

Comments were also received from Moen, PMI, Kohler, and Sloan Valve during the public comment period following publication of the May 2012 NOPR, requesting that DOE incorporate ASME's draft definition of hand-held showerhead: "An accessory to a supply fitting, that can be hand-held or fixed in place for the purpose of spraying water onto a bather, and which is connected to a flexible hose." (Moen, No. 4 at p. 3; PMI, No. 8 at p. 4; PMI, Public Meeting Transcript, No. 11 at pp. 56–57; Kohler, No. 9, pp. 3–4; Sloan Valve, No. 12 at p. 3) However, DOE believes that incorporating the phrase "and which is connected to a flexible hose" found in the ASME hand-held showerhead definition restricts the definition because it may not encompass all hand-held showerhead configurations in the marketplace. Therefore, in this SNOPR, DOE proposes to define "hand-held showerhead" as follows: "A showerhead that can be hand-held or fixed in place for the purpose of spraying water onto a bather."

In addition, because DOE proposes to exclude body sprays from the current definition of showerhead, DOE proposes (as explained below) to revise its test procedure to clarify that body sprays that are components of "shower towers" should be turned off during testing to permit testing of the integral showerhead(s). For context, DOE generally understands that the term shower tower is typically used in reference to single supply fittings that are designed for attachment to one or more hot and cold water connections in a shower or bath and that are comprised of at least one showerhead and one or more body sprays, but that may also include a

hand-held showerhead and either a valve for selecting spraying components, a thermostatic mixing valve, or both.

DOE also seeks to clarify the treatment of other products that are components of a shower tower but are otherwise covered. Based upon the description in the previous paragraph, a shower tower would represent a combined system that delivers water to individual supply fittings downstream of a temperature mixing valve. If each covered spraying component is individually isolable from any other covered spraying component downstream of the mixing valve by a valve or other isolating device installed within the plumbing system and not within the spraying device itself, each spraying component represents an individual supply fitting that is covered separately. This is in contrast to a product that has multiple spraying components and is designed to be attached to a single supply fitting downstream of the mixing valve, such as the threaded overhead pipe in a shower. According to the definition of "showerhead" proposed in this notice, such a product would be covered as a showerhead since it is designed to be attached to a single supply fitting. The product itself may contain a valve or other device to isolate its spraying components from each other, but since the spraying components and diverter device are distributed in commerce together for attachment as a composite unit to a supply fitting, the product is distinct from the plumbing system. In the case of the shower tower, the device that isolates one spraying component from one or more other spraying components is within the plumbing system, making the spraying components separate fittings.

Finally, DOE notes that no definition currently exists in EPCA or in 10 CFR 430.2 for the term "safety shower showerhead," which is a type of showerhead specifically excluded from

coverage by EPCA. 42 U.S.C. 6291(31)(D). Because of this lack of a definition, confusion may exist as to which products qualify for exclusion from coverage. DOE notes that the current Occupational Safety and Health Administration (OSHA) regulation addressing safety showers, which is located at 29 CFR 1910.151(c), does not define the term or specify required characteristics of a safety shower showerhead. However, certain State regulatory requirements that address safety showers use as a reference American National Standards Institute (ANSI) Standard Z358.1, Emergency Eyewash and Shower Equipment.[2] This standard contains specific design and performance criteria that safety showers must meet, such as flow rate and accessibility, which may enable the establishment of a common definition for the showerhead portion of a safety shower. DOE is interested in receiving comments on whether such a definition is needed, and if so, whether it is appropriate to define a safety shower showerhead as a showerhead that is designed to meet the requirements of ANSI Standard Z358.1, or if a more appropriate definition exists.

DOE requests comments on these proposed changes to the definitions of showerhead and hand-held showerhead, its proposal not to include body sprays in the proposed showerhead definition, its proposal that body sprays that are components of shower towers be disabled during testing, and on the need for a definition of safety shower showerhead.

2. Test Procedure for Showerhead Flow Control Insert

EPCA includes a provision that showerheads must meet the requirements of section 7.4.3(a) of ASME A112.18.1M-1989, which requires that if a flow control insert is used as a

[2] For example, see Title 8 of the California Code of Regulations, Section 5162, Emergency Eyewash and Shower Equipment.

component of a showerhead, the showerhead must be manufactured such that a pushing or pulling force of 8 lbf or more is required to remove the flow control insert. (42 U.S.C. 6295(j)(1)) DOE subsequently adopted this provision in 10 CFR 430.32(p), and later updated that paragraph upon incorporation by reference of ASME A112.19.1M-1996 to reflect that it had been moved to section 7.4.4(a). This provision has been retained in the updated A112.18.1-2011, but has been moved from section 7.4.4(a) to section 4.11.1.

In the May 2012 NOPR, DOE did not propose to change this design requirement, but requested comments and information on prospective methods for verifying that the requirement in section 4.11.1 of ASME A112.18.1-2011 has been met, as well as comments and information on showerhead designs that may complicate verification of the force requirement or make verification unnecessary. 77 FR at 31747.

Moen, PMI, Kohler, ICC, and Sloan Valve commented that DOE should not develop a standardized test for flow control insert retention to address the showerhead design requirement. These commenters noted that it would be difficult to design a standardized test that could accommodate different designs in the marketplace and that such a test could hinder innovation of new products and make showerhead repair difficult. (Moen, No. 4 at p. 2; PMI, No. 8 at p. 2; Kohler, No. 9 at p. 3; Kohler, Public Meeting Transcript, No. 11 at p. 47; ICC, Public Meeting Transcript, No. 11 at pp. 48–49; Sloan Valve, No. 12 at p. 2) In contrast, NRDC recommended that DOE develop a standardized test procedure to ensure that manufacturers produce showerheads with flow control inserts that are not easily removed. (NRDC, Public Meeting Transcript, No. 11 at pp. 47-48)

After receiving comments on this issue, DOE obtained 21 showerheads to investigate the design requirement for retention of the flow control insert. The selected showerheads included a variety of brands and styles. In general, there were four basic flow control designs:

(1) Some showerheads contained a plastic disc insert, either with or without an o-ring in the middle of the insert;

(2) Others contained a rubber disc insert;

(3) Others did not have any flow control insert; instead, flow control was integral to the showerhead housing; and

(4) One showerhead's sealing gasket (i.e., the seal between the showerhead and the supply fitting) also functioned as the flow control mechanism.

Showerheads with integral flow control were found to automatically meet the design requirements per A112.18.1-2011, section 4.11.1 because these showerheads did not contain a flow control insert that could be removed. The showerheads that used a sealing gasket as the flow control mechanism were exempt from the design requirement because A112.18.1, section 4.11.1 states that the design requirement does not apply if significant leakage between the showerhead and supply fitting occurs as a result of the flow control insert being removed, and these products leak significantly from areas other than the spray face when used without the gasket. In this context, DOE interprets the term "leak significantly" to mean the visible emergence of water from parts of the showerhead other than the spray face or nozzle that does not occur when the flow control insert is installed, such as from the connection between the showerhead and the plumbing fitting.

DOE then tested subsets of the remaining showerheads (i.e., those with plastic disc inserts and rubber disc inserts) using two different methods to determine the optimal method for determining whether the flow control insert could be removed using a pushing or pulling force of less than 8 pounds.

a. Pulling-Force Test

First, DOE conducted a pulling-force test, which involved the following general steps, on a subset[3] of the relevant showerheads: (1) removing (a) the showerhead's sealing gasket, which provides a seal between the showerhead and supply fitting, and (b) the screen upstream of the flow control insert; (2) securing the showerhead; (3) attaching a clamp to the flow control insert that could withstand a force of at least 20 lbf; (4) attaching a force transducer to the clamp, which was capable of measuring a maximum force of 25 lbf on the flow control insert; and (5) applying a consistent pulling force to the flow control insert for between 10 and 20 seconds with the average pulling force recorded at 0.5 second intervals.

Of the 10 showerheads subjected to the pulling-force test, three flow control inserts (two plastic disc flow control inserts and one rubber disc insert) were clearly removed with a pulling force of under 8 lbf, while two flow control inserts (both plastic disc inserts) were removed with a force close enough to the 8 lbf level that it was unclear whether the actual force required to

[3] Four showerheads with plastic inserts were manufactured with the insert embedded very in tightly in the housing, making removal difficult enough that DOE deemed the test unnecessary for those products; six showerheads with integral flow control in the fixture housing were not tested; the showerhead with a sealing gasket as the flow control was not tested because it is exempt from the design requirement.

remove the insert was more or less than 8 lbf. Five showerheads that contained plastic disc flow control inserts were tested and the inserts could not be removed with a pulling force of 8 lbf.

b. Gravity Test

As a potential alternative to the pulling-force test, DOE developed a gravity test that simplifies the pulling-force test by using a calibrated 8 pound-mass (lbm) to exert a constant 8 lbf on the flow control insert. This test, which is described in further detail in the section below, eliminates the requirement for a force transducer and data logger, limits cost burden, and ensures the test is easily repeatable. Of the 5 units subjected to this test, 2 failed and 3 passed; the results were not inconclusive for any of the units.

c. Conclusions Based on DOE Testing

DOE's investigation and lessons learned from the preliminary testing described above showed that, with respect to flow control insert testing, there are three general categories of showerheads: (1) showerheads that contain a flow control insert that is also the sealing gasket and are therefore exempt from the design requirement; (2) showerheads with a flow control device that is an integral feature of the housing and cannot be removed and are therefore exempt from the showerhead design requirement; and (3) showerheads containing a flow control insert where testing of the insert retention can be accomplished using a pulling-style test. DOE found no showerheads for which the flow control insert could be more easily removed using a pushing force rather than a pulling force.

Thus, in this SNOPR, DOE proposes a simplified gravity pull-style test procedure that will allow DOE to validate the statutory flow control insert design requirement that is currently included in manufacturers' certification reports. The proposed test method includes the following steps: (1) remove the showerhead's sealing gasket, which provides a seal between the showerhead and supply fitting, and the screen upstream of the flow control insert (however, if the sealing gasket also functions as the flow control insert and would cause visible leakage from areas other than the showerhead's spray face if removed, then the showerhead would be exempted from the design requirement and no further testing would be necessary); (2) attach a clamp (or other grasping device) to the flow control insert such that a force of at least 8 lbf can be applied without separating the clamp (or other device) from the flow control insert (if a clamp or other grasping device that would enable physical removal of the flow control insert cannot be attached, then the showerhead meets the design requirement and no further testing would be necessary); (3) secure the showerhead such that the visible face of the flow control insert is downward (e.g., the spraying face of the showerhead faces directly upward) and a force of at least 8 lbf will not cause the showerhead to move; (4) apply a pulling force using a combined 8 lbm (total combined weight includes clamp, connecting linkage, and hanging mass) secured to the clamp and lowered beneath the showerhead until the mass freely hangs such that a downward 8 lbf is exerted on the flow control insert; and (5) continue to apply the 8 lbf to the flow control insert for a minimum of 60 seconds. The showerhead would be compliant with the design requirement if, after this period has elapsed, the flow control insert is completely retained in the showerhead housing with no movement. In this SNOPR, DOE proposes the use of this test method as a means to validate that showerheads meet the flow control insert design requirement for situations in which compliance with the requirement is in dispute. However, DOE is not

proposing to mandate that this test method be conducted by manufacturers as part of an initial certification that a basic model of showerhead is in compliance with this requirement.

DOE requests comments on the proposed test method for verifying the retention requirement for the showerhead flow control insert, specifically related to the practicality of the test method and any potential impacts on showerhead design.

3. Test Procedure Amendment for Supply Fittings with Integral Body Sprays

In light of DOE's proposal to exclude body sprays from the definition of "showerhead," DOE also proposes to revise the showerhead test procedure located at Appendix S to subpart B of part 430 to include instructions for testing a single fitting that consists of at least one showerhead and at least one integral body spray (colloquially called a "shower tower"). ASME A112.18.1, section 5.4.2.1 (part of section 5.4, Flow Rate, which DOE proposed to incorporate by reference in the NOPR), provides that a "specimen" to be tested shall "have its standard accessories installed, when tested for compliance with the maximum flow rates." Because DOE is not proposing to include body sprays in the definition of "showerhead," DOE proposes to clarify in Appendix S that the body spray portion of a "shower tower" should be turned off during testing. DOE also proposes to clarify in Appendix S that where the text of Appendix S conflicts with section 5.4, the text of Appendix S controls.

4. Test Procedure Amendments for Gravity Flush Tank Water Closet Trim Adjustments

In written comments submitted to DOE and in oral comments made during the public meeting, NRDC urged DOE to consider requiring manufacturers to adjust the tank trim

components to the maximum flush volume setting during testing. (NRDC, Public Meeting Transcript, No. 11 at pp. 70–71; NRDC, No. 14 at p. 3) In this context, tank trim refers to the components in the tank that can be adjusted by the consumer such as the water level, fill valve timing, and related components. While DOE's current test procedure does not address this issue, ASME A112.19.2-2008, section 7.1.2, specifies that for gravity flush tank water closets, water level in the tank and fill time shall be adjusted in accordance with the manufacturer's instructions and specifications at each test pressure. Table 5 in ASME A112.19.2-2008 specifies that "[a]djustments to tank trim components shall be permitted only when changes to test pressures are indicated" and that "[n]o adjustments shall be allowed between tests employing like pressures." These provisions ensure that once the trim is set to the manufacturer's specifications, the water level and fill time adjustments remain the same for tests that use like pressures, which simulates how water closets are used in real world application.

After receiving comments from NRDC, DOE investigated water closet manufacturers' instructions on gravity flush tank trim adjustments. Based upon a review of installation instructions for representative models from eight separate manufacturers, DOE found that only one manufacturer did not include specific instructions regarding the adjustments made to the tank water level. Based on these findings, DOE believes it to be likely that the majority of manufacturers' installation instruction manuals for gravity flush tank water closets specify the tank water level and also provide directions on adjusting the tank's water level. However, DOE found that few manufacturers provide information on the recommended adjustment of other trim components, such as the flapper valve or fill valve. Section 7.1.2 of ASME A112.19.2-2008 only specifies adjustments made to the tank water level and fill time and does not specify adjustments

made to other trim components such as the flapper valve. Taking into account the variety of water closet designs on the market, it is unclear whether the impact on flush volume of trim adjustments that are not specified in manufacturer's instructions or in ASME A112.19.2-2008 is significant.

Based on these findings, DOE proposes in this SNOPR to amend the test procedures for gravity flush tank toilets to require that, at each test pressure specified in Table 5 of ASME A112.19.2-2008, trim components of gravity flush tank water closets that can be adjusted to cause an increase in flush volume, including (but not limited to) the flapper valve, fill valve, and float, would be set in accordance with the printed installation instructions supplied by the manufacturer. For products with instructions that do not specify trim setting adjustments, DOE would require that these trim components be adjusted to the maximum water use setting so that the maximum flush volume is produced without causing the water closet to malfunction or leak. In this context, DOE interprets "malfunction or leak" to mean that the product is otherwise unable to meet the requirements of the ASME A112.19.2 standard for basic functionality. In addition, the water level in the tank would be set to the maximum level indicated in the printed installation instructions supplied by the manufacturer or the water line indicated on the tank itself, whichever is higher. If the product's installation instructions or the water closet tank do not indicate a water level, DOE would require that the water level be adjusted to 1 ± 0.1 inches below the top of the overflow tube or 1 ± 0.1 inches below the top rim of the water-containing vessel (for gravity flush tank water closets that do not contain an overflow tube) for each designated pressure specified in Table 5 of ASME A112.19.2-2008.

DOE requests comments on the proposed amendment to the gravity flush tank water closest test procedures, specifically with respect to the potential effects on flush volume of tank trim adjustments, any impact on water closet design that may occur due to the proposed amendments, including its interpretation of the term "malfunction or leak."

5. Static Test Pressure for Flushometer Valve Siphonic and Blowout Water Closets

In written comments submitted to DOE, NRDC and the Appliance Standards Awareness Project (ASAP) recommended that DOE evaluate the effect of averaging test results that have been obtained at different test pressures of siphonic flushometer style water closets, which is the general method used in both the ASME A112.19.6-1995 standard referenced in the DOE test procedure for water closets and in the newer ASME A112.19.2-2008 procedure. (NRDC/ASAP, No. 14 at p. 2) NRDC/ASAP further suggested that DOE should require reporting of the higher water consumption value obtained by averaging three tests at 80 psi and averaging three tests at 35 psi for siphonic flushometer water closets and, at a minimum, should discard the 2 to 1 weighting of test results at the lower pressure. (NRDC/ASAP, No. 14 at p. 2) Although not specifically mentioned by NRDC and ASAP in their comments, DOE also requires an additional low pressure test at 45 psi for blowout flushometer water closets that results in a 2 to 1 weighting of results.

DOE agrees that use of the 2 to 1 ratio for averaging water consumption of flushometer valve siphonic and blowout water closets at the pressures currently indicated in Table 5 of ASME A112.19.2-2008 potentially could lead to results that are not representative across a range of pressures if DOE were to incorporate by reference this test method. Further, DOE notes that

the weighting of two low pressure tests to one high pressure test presented in Table 5 of ASME A112.19.2-2008 diverges from previous versions of the ASME test method because tank type water closets are tested at three distinct static pressures, as were flushometer water closets in the previous version of the standard. For these reasons, DOE proposes to amend 10 CFR part 430, appendix T, "Test Measurement," to require that water consumption tests be conducted at two static pressures, with three tests at each pressure (i.e., six total tests, rather than nine). For flushometer valve water closets with a siphonic bowl, DOE proposes that the test pressures be 80 psi and 35 psi. For flushometer valve water closets with a blowout bowl, DOE proposes that the test pressures be 80 psi and 45 psi. According to this proposal, the test shall be run three times at each pressure as specified in section 7.4.3, "Procedure," of ASME Standard A112.19.2-2008.

DOE requests comments on the proposal to amend the number of required tests for flushometer valve siphonic and blowout bowl water closets to require three tests at each of two pressures rather than three tests at each of three pressures.

6. Testing and Reporting of Dual-Flush Water Closets

In the May 2012 NOPR, DOE proposed a test method to account for the reduced average water use of dual-flush water closets, which are capable of being flushed in either a full volume flush mode or in a reduced volume mode. Under the proposed test procedure, the flush volume of the reduced flush would be measured using section 7.4 of ASME A112.19.2–2008 in the same manner as the full flush, and the average representative water use would be calculated using the composite average of two reduced flushes and one full flush. 77 FR at 31746. This proposed method was based upon the test method used by the Environmental Protection Agency (EPA)

WaterSense program[4] for measuring the flush volume of dual-flush water closets and used a weighted average of the full and reduced flush volumes. However, DOE did not propose to make this test method the required means for testing dual-flush water closets for the purposes of certification in 10 CFR part 429. Rather, the intent in including this test method was to provide manufacturers with a potential means to evaluate the representative water use of these products under conditions of expected consumer use for the purposes of labeling and other representations. The test method required for certification would remain the standard full-flush volume test for products that do not have a dual-flush capability.

DOE received several comments in response to the NOPR that opposed incorporation of the proposed test method for dual-flush products. Alliance for Water Efficiency (AWE), Kohler, Moen, and Sloan Valve commented that because of DOE's statutory authority, which addresses only the maximum water use of water closets, dual-flush water closets should only be tested in full-flush mode in accordance with ASME A112.19.2. (AWE, No. 13 at p.2; Kohler, No. 9 at pp. 2-3; Moen, No. 4, p. 2; Sloan Valve, No. 12, p. 2). Also, AWE, ICC, Kohler, Maximum Performance Testing (MaP), Moen, NRDC, and Sloan Valve stated that the weighted average approach was unproven and that the particular ratio required further evaluation to confirm its representativeness. (AWE, No. 13 at p. 2; ICC, Public Meeting Transcript No. 11 at pp. 36-37; Kohler, No. 9 at pp. 2-3; MaP, No. 10 at pp. 3-4; Moen, No. 4 p. 2; NRDC, No. 14 at pp. 3-4; Sloan Valve, Public Meeting Transcript, No. 11 at pp. 38-39) In addition, Kohler, Moen, and Sloan Valve stated that confusion in the marketplace might result if DOE were to issue a method

[4] WaterSense is a voluntary partnership program administered by the EPA which, among other activities, promotes water conservation by providing certification and labeling for water consuming products, including water closets, that meet certain water conservation standards. Further information is available at *http://www.epa.gov/WaterSense/index.html.*

different from the WaterSense method to determine the representative average flush volume for dual-flush water closets. (Kohler, No. 9 at pp. 2-3; Moen, No. 4 at p. 2; Sloan Valve, No. 12 at p. 2)

In response to these comments, DOE proposes in today's notice not to include a dual-flush test method in appendix T of subpart B of 10 CFR part 430 and instead to indicate specifically in section 429.30 of 10 CFR part 429 that the flush volume to be reported to DOE in certifications of compliance for water closets is the full-flush volume. DOE will continue to evaluate the merits of a weighted average approach to measuring the representative water use of dual-flush products and may consider proposing a revised test method in a future rulemaking. DOE notes that 42 U.S.C. 6293(c) prohibits making representations with respect to the water use of a covered product unless such product has been tested in accordance with the DOE test procedure and the representation fairly discloses the results of such testing.

B. Supplementary Plumbing Requirements

1. Definition of a Basic Model for Water Closets and Urinals

In the May 2012 NOPR, DOE proposed to retain the existing definition of a basic model as it applies to water closets and urinals, but emphasized that the manner in which individual models may be grouped together as basic models for purposes of reporting water consumption in accordance with 10 CFR 429.12 should be based on the maximum volume for a given bowl (or urinal body) and the valve with which it is designed to operate. 77 FR at 31748 (May 30, 2012). In other words, by certifying a given pairing of water closet bowl and valve (or tank) or urinal body and valve as a basic model under the existing certification and compliance framework, the

manufacturer would be certifying that the pairing on which that basic model's rating is based is the maximum flush volume that model of water closet or urinal body is designed to receive, and that it could not be paired with a flushing device or tank that would provide a higher flush volume and still function properly.

During the July 2012 public meeting, NRDC commented that it remained unclear how DOE expects the valve/bowl pairing combination to work in practice. NRDC pointed to DOE's own NOPR language indicating that different valve and china combinations could result in different flush volumes. (NRDC, Public Meeting Transcript, No. 11 at pp. 60–61) In follow-up written comments submitted jointly, NRDC and ASAP stated that DOE's explanation of the compliance certification in the NOPR failed to clarify how a fixture manufacturer can establish that its bowl cannot be paired with a flushing device that would provide a higher flush volume and still function properly. (NRDC/ASAP, No. 14 at p. 6) NRDC stated that because DOE is aware of the variability of flush volume based on the valve/bowl combination, it must find a way to verify that products shipped in commerce can reliably meet the standard. Finally, NRDC and ASAP suggested that DOE should consider expanding the definition of "tested combination" in 10 CFR 430.2 to include information specific to water closets and urinals, along with their associated flushing devices. (NRDC/ASAP, No. 14 at p. 6) During the public meeting, NRDC and ASAP also inquired whether new valves shipped in commerce that are not paired with a bowl are covered products by DOE and require certification. (NRDC, Public Meeting Transcript, No. 11 at p. 62; ASAP, Public Meeting Transcript, No. 11 at p. 64).

Based on these comments, DOE further investigated the issues revolving around the basic model definition and certification of water closets and urinals. First, the definitions of a water closet and urinal per ASME A112.19.2 and 10 CFR 430.2 state that these products are receiving vessels that, upon actuation, convey waste through a trap to a drainage system. The flushing device, such as a flushometer valve, is not considered a water closet or urinal, and therefore is not itself a covered product under DOE's regulations. The water closet bowl or urinal body, which is covered by DOE regulations, is designed to receive a specified volume of water per flush provided by the flushometer valve. Under the current general certification requirements in 10 CFR 429.12 and product-specific sampling and reporting requirements in 10 CFR 429.30 (429.31 for urinals), manufacturers of flushometer water closets (and urinals) must only certify the water closet bowl (or urinal body) based on data obtained from testing using the DOE test procedure, and are not required to report information on the flushometer valve that was paired with the fixtures during testing. However, a water closet bowl (or urinal) must be paired with a flushometer valve device to function properly. Without the valve, the water closet could not be actuated and could not convey waste into the drainage system, thus preventing it from meeting the DOE definition of a water closet. In addition, water closet bowls and urinals are designed for a specified flush volume, and thus must be paired with a valve that is designed to provide this specific volume.

As a result of the comment made by NRDC, DOE re-examined ASME A112.19.2-2008 and determined that a provision related to the test setup for flushometer valves in section 7.1.5, which DOE had not proposed for incorporation by reference in the May 2012 NOPR, partially addresses this issue. This section describes the steps to standardize the water supply system for

testing water closets. Section 7.1.5.2, which covers standardization for flushometer water closets, clearly states that a flushometer valve must be connected to the test bowl and specifies that while conducting the water consumption test, the valve is required to maintain a peak flow rate. Incorporating this provision will ensure that a water closet is paired with a flushometer valve that produces the required maximum flush volume during the water consumption test. Therefore, to clarify the definition of basic model for flushometer water closets, DOE proposes to incorporate by reference section 7.1.5 of ASME A112.19.2-2008.

Similar steps for standardizing the water supply for flushometer urinals are contained in section 8.2 of ASME A112.19.2-2008. DOE proposed to incorporate by reference this section of the ASME standard in the May 2012 NOPR, and did not receive any comments opposing the proposal. 77 FR at 31745 (May 30, 2012).

Further, DOE proposes changes to the certification requirements in 10 CFR 429.30(b)(2) for water closets and 10 CFR 429.31(b)(2) for urinals to require manufacturers to identify in their certification reports the flushometer valve that was used during the water consumption test. According to this proposal, the flushometer valve identified in the certification report must represent the flush volume of any other valve with the same flush volume rating. Manufacturers who wish to advertise flush volume ratings of high-efficiency flushometer water closets and urinals would be able to do so as long as the rating is based upon a pairing of the model with a valve with which it is designed to operate, the product pairing has been tested in accordance with test methods in ASME A112.19.2-2008, and the certification reports properly identify the flushometer valve used during the water consumption test.

DOE requests comments on this interpretation of the definition of a basic model of water closet and urinal and the associated proposed amendments to the certification requirements.

2. Minor Editorial Changes

In reviewing the certification requirements applicable to the products addressed in this proposed rule, DOE noted that the current reporting requirement for urinals in 10 CFR 429.31(b)(2) requires reporting of water consumption for trough-type urinals in gpm. Since the Federal water consumption standard for urinals in 10 CFR 430.32(r), including trough-type urinals, is expressed in units of gallons per flush (gpf), DOE believes that the appropriate units of measure for reporting water consumption of trough-type urinals also should be gallons per flush. Accordingly, DOE is proposing in this notice to amend the existing language of 10 CFR 429.31(b)(2) to reflect that the water consumption of trough-type urinals should be reported in gallons per flush.

DOE also noted that the amendments to the certification requirements for showerheads proposed in the May 2012 NOPR did not reflect the proposed change to the language of 10 CFR 430.32(p). The proposed language there no longer references an ASME standard. Instead, it explains the design requirement. Therefore, the certification requirements for showerheads in 10 CFR 429.29 should no longer reference any ASME standard, but should instead reference the requirements laid out in 430.32(p). Accordingly, DOE is proposing to reference 430.32(p) in its certification requirements for showerheads. In addition, because the declaration that a showerhead meets the relevant design requirement is public information, DOE proposes to move

this certification requirement into 429.29(b)(2) rather than retaining it in a separate section, 429.29(b)(3).

III. Procedural Issues and Regulatory Review

The regulatory reviews for this proposed rule are identical to those conducted for the May 2012 NOPR. Please see the May 2012 NOPR for additional details. 77 FR at 31749–31752 (May 30, 2012). With respect to review under the Regulatory Flexibility Act (5 U.S.C. 601 et seq.), DOE is proposing a test method to validate that the showerhead flow control insert design requirement has been satisfied; however, the use of the test during certification is optional. Because manufacturers are not required to perform the proposed test to meet DOE's certification requirements, DOE does not expect any additional testing burden or cost. Thus, DOE continues to tentatively conclude and certify that the proposed rule would not have a significant economic impact on a substantial number of small entities. Accordingly, DOE will transmit the certification and supporting statement of factual basis to the Chief Counsel for Advocacy of the Small Business Administration for review under 5 U.S.C. 605(b).

IV. Public Participation

A. Submission of Comments

DOE will accept comments, data, and information regarding this proposed rule no later than the date provided in the DATES section of this proposed rule. Interested parties may submit comments using any of the methods described in the ADDRESSES section of this proposed rule.

Submitting comments via regulations.gov. The regulations.gov web page will require you to provide your name and contact information. Your contact information will be viewable to DOE Building Technologies staff only. Your contact information will not be publicly viewable except for your first and last names, organization name (if any), and submitter representative name (if any). If your comment is not processed properly because of technical difficulties, DOE will use this information to contact you. If DOE cannot read your comment due to technical difficulties and cannot contact you for clarification, DOE may not be able to consider your comment.

However, your contact information will be publicly viewable if you include it in the comment or in any documents attached to your comment. Any information that you do not want to be publicly viewable should not be included in your comment or in any document attached to your comment. Persons viewing comments will see only first and last names, organization names, correspondence containing comments, and any documents submitted with the comments.

Do not submit to regulations.gov information for which disclosure is restricted by statute, such as trade secrets and commercial or financial information (hereinafter referred to as Confidential Business Information (CBI)). Comments submitted through regulations.gov cannot be claimed as CBI. Comments received through the website will waive any CBI claims for the information submitted. For information on submitting CBI, see the "Confidential Business Information" section.

DOE processes submissions made through regulations.gov before posting. Normally, comments will be posted within a few days of being submitted. However, if large volumes of comments are being processed simultaneously, your comment may not be viewable for up to several weeks. Please keep the comment tracking number that regulations.gov provides after you have successfully uploaded your comment.

Submitting comments via email, hand delivery, or mail. Comments and documents submitted via email, hand delivery, or mail also will be posted to regulations.gov. If you do not want your personal contact information to be publicly viewable, do not include it in your comment or any accompanying documents. Instead, provide your contact information on a cover letter. Include your first and last names, email address, telephone number, and optional mailing address. The cover letter will not be publicly viewable as long as it does not include any comments

Include contact information each time you submit comments, data, documents, and other information to DOE. If you submit via mail or hand delivery, please provide all items on a CD, if feasible. It is not necessary to submit printed copies. No facsimiles (faxes) will be accepted.

Comments, data, and other information submitted to DOE electronically should be provided in PDF (preferred), Microsoft Word or Excel, WordPerfect, or text (ASCII) file format. Provide documents that are not secured, are written in English, and are free of any defects or viruses. Documents should not contain special characters or any form of encryption and, if possible, they should carry the electronic signature of the author.

Campaign form letters. Please submit campaign form letters by the originating organization in batches of between 50 to 500 form letters per PDF or as one form letter with a list of supporters' names compiled into one or more PDFs. This reduces comment processing and posting time.

Confidential Business Information. Any person submitting information that he or she believes to be confidential and exempt by law from public disclosure should submit via email, postal mail, or hand delivery two well-marked copies: one copy of the document marked confidential including all the information believed to be confidential, and one copy of the document marked non-confidential with the information believed to be confidential deleted. Submit these documents via email or on a CD, if feasible. DOE will make its own determination about the confidential status of the information and treat it according to its determination. 10 CFR 1004.11(e)

Factors of interest to DOE when evaluating requests to treat submitted information as confidential include: (1) A description of the items; (2) whether and why such items are customarily treated as confidential within the industry; (3) whether the information is generally known by or available from other sources; (4) whether the information has previously been made available to others without obligation concerning its confidentiality; (5) an explanation of the competitive injury to the submitting person which would result from public disclosure; (6) when such information might lose its confidential character due to the passage of time; and (7) why disclosure of the information would be contrary to the public interest.

It is DOE's policy that all comments may be included in the public docket, without change and as received, including any personal information provided in the comments (except information deemed to be exempt from public disclosure).

B. Issues on Which DOE Seeks Comment

Although DOE welcomes comments on any aspect of this proposal, DOE is particularly interested in receiving comments and views of interested parties concerning the following issues:

1. DOE requests comments on the proposed definitions of showerhead and hand-held showerhead, its proposal to remove body sprays from the proposed showerhead definition, its proposal that body sprays that are components of shower towers be disabled during testing, and on the need for a definition of safety shower showerhead.
2. DOE requests comments on the proposed test method for verifying the retention requirement for the showerhead flow control insert, specifically related to the practicality of the test method and any potential impacts on showerhead design.
3. DOE requests comments on the proposed amendment to the gravity flush tank water closet test procedure, specifically related to potential effects on flush volume of tank trim adjustments and any impact on water closet design resulting from the proposed amendments, including DOE's interpretation of the term "malfunction or leak."
4. DOE requests comments on the proposal to amend the number of required tests for flushometer valve siphonic and blowout bowl water closets to require three tests at each of two pressures rather than three tests at each of three pressures.

5. DOE requests comments on its interpretation of the definition of a basic model of water closet and urinal and the associated proposed amendments to the certification requirements.

V. Approval of the Office of the Secretary

The Secretary of Energy has approved publication of this proposed rule.

List of Subjects

10 CFR Part 429

Administrative practice and procedure, Confidential business information, Energy conservation, Imports, Intergovernmental relations, Small businesses.

10 CFR Part 430

Administrative practice and procedure, Confidential business information, Energy conservation, Imports, Incorporation by reference, Intergovernmental relations, Small businesses.

Issued in Washington, DC, on April 2, 2013.

_____

Kathleen B. Hogan
Deputy Assistant Secretary for Energy Efficiency
Energy Efficiency and Renewable Energy

For the reasons stated in the preamble, DOE proposes to amend parts 429 and 430 of chapter II of title 10 of the Code of Federal Regulations, as set forth below:

PART 429 – CERTIFICATION, COMPLIANCE, AND ENFORCEMENT FOR CONSUMER PRODUCTS AND COMMERCIAL AND INDUSTRIAL EQUIPMENT

1. The authority citation for part 429 continues to read as follows:

Authority: 42 U.S.C. 6291 – 6317.

2. Section 429.29 is amended by revising paragraph (b)(2) and removing paragraph (b)(3) to read as follows:

§ 429.29 Showerheads.

* * * * *

(b) * * *

(2) Pursuant to §429.12(b)(13), a certification report shall include the following public product-specific information: The maximum water use in gallons per minute (gpm) rounded to the nearest 0.1 gpm, the maximum flow water pressure in pounds per square inch (psi), whether the showerhead is exempt from the requirements of §430.32(p) pertaining to mechanical retention of the flow-restricting insert, and a declaration that the showerhead meets the requirements of §430.32(p) pertaining to mechanical retention of the flow-restricting insert, if applicable.

3. Section 429.30 is amended by revising paragraph (b)(2) to read as follows:

§ 429.30 Water closets.

* * * * *

(b) * * *

(2) Pursuant to §429.12(b)(13), a certification report shall include the following public product-specific information: The maximum water use in gallons per flush (gpf), rounded to the nearest 0.01 gallon. For flushometer water closets, the brand name and individual model number of the flushometer valve used during certification testing shall be included in the certification report. For dual-flush water closets, the maximum water use to be reported is the flush volume observed when tested in the full-flush mode.

4. Section 429.31 is amended by revising paragraph (b)(2) to read as follows:

§ 429.31 Urinals.

* * * * *

(b) * * *

(2) Pursuant to §429.12(b)(13), a certification report shall include the following public product-specific information: The maximum water use in gallons per flush (gpf), rounded to the nearest 0.01 gallon; and, for trough-type urinals, the maximum water use in gallons per flush (gpf), rounded to the nearest 0.01 gallon, and the length of the trough in inches (in). For flushometer urinals, the brand name and individual model number of the flushometer valve used during certification testing shall be included in the certification report.

PART 430 – ENERGY CONSERVATION PROGRAM FOR CONSUMER PRODUCTS

5. The authority citation for part 430 continues to read as follows:

Authority: 42 U.S.C. 6291 – 6309; 28 U.S.C. 2461 note.

6. Section 430.2 is amended by adding, in alphabetical order, a definition for "hand-held showerhead" and by revising the definition of "showerhead" to read as follows:

§ 430.2 Definitions.

* * * * *

Hand-held showerhead means a showerhead that can be hand-held or fixed in place for the purpose of spraying water onto a bather.

* * * * *

Showerhead means a component of a supply fitting, or set of components distributed in commerce for attachment to a single supply fitting, for spraying water onto a bather, typically from an overhead position, including hand-held showerheads, but excluding safety shower showerheads.

* * * * *

7. Appendix S to subpart B of part 430 is amended by adding a note after the heading, revising section 2.b, and adding section 3, to read as follows:

APPENDIX S TO SUBPART B OF PART 430--UNIFORM TEST METHOD FOR MEASURING THE WATER CONSUMPTION OF FAUCETS AND SHOWERHEADS

Note: Any representation related to water consumption of showerheads or faucets made after [insert date 180 days after date of publication of faucets and showerheads test procedure final rule] must be made based upon results generated using this test procedure. Any representation related to water consumption of showerheads or faucets made between [insert date 30 days after date of publication of faucets and showerheads test procedure final rule] and [insert date 180 days after date of publication of faucets and showerheads test procedure final rule] must be based upon results generated either under this test procedure or upon the test procedure as it appeared at 10 CFR part 430, subpart B, appendix S, in the 10 CFR parts 200 to 499 edition revised as of January 1, 2012.

* * * * *

2. * * *

* * * * *

b. Showerheads—The test procedures to measure the water flow rate for showerheads, expressed in gallons per minute (gpm) or liters per minute (L/min), shall be conducted in accordance with the test requirements specified in section 5.4, Flow Rate, of the ASME/ANSI Standard A112.18.1 (incorporated by reference, see § 430.3). Measurements shall be recorded at the resolution of the test instrumentation. Calculations shall be rounded off to the same number of significant digits as the previous step. The final water consumption value of each tested unit shall be rounded to one decimal place. For showerheads or showerhead assemblies that are a component of a single supply fitting with integral body sprays, the body spray(s) shall be

disabled for the test.

3. Showerhead Flow Control Insert Test.

The following test method is for verification of compliance with the requirements of 10 CFR 430.32(p) pertaining to retention of showerhead flow control inserts. This test is not required for certification under 10 CFR 429.12 but may be used to verify compliance with those requirements.

(a) General provisions:

(1) If removal of the flow control insert would cause significant leakage between the showerhead and the supply fitting, the showerhead is exempt from the flow control insert design requirement.

(2) If the means of controlling flow rate is not physically removable, the showerhead is exempt from the flow control insert design requirement.

(b) Test method:

If items in section (3)(a) of this appendix do not apply, perform the following steps:

(1) Remove the showerhead's sealing gasket, which provides a seal between the showerhead and supply fitting, and the screen upstream of the flow control insert (if present).

(2) Attach a clamp (or other grasping device) to the flow control insert such that a force of at least 8 lbf can be applied without separating the clamp (or other grasping device) from the flow control insert.

(3) Secure the showerhead such that the visible face of the flow control insert is directly downward and a force of at least 8 lbf will not cause the showerhead to move.

(4) Apply a pulling force using a combined 8 pound-mass (lbm) (± 0.4 lbm) (total combined weight including clamp, connecting linkage, and hanging mass) secured to the clamp and lowered beneath the showerhead at a rate of no more than 1 inch per second until the mass freely hangs such that a downward 8 lbf is exerted on the flow control insert.

(5) Continue to apply the 8 lbf to the flow control insert for a minimum of 60 seconds.

(c) Determination:

If the flow control insert is retained in the showerhead after performing sections (3)(b)(1) through (5) of this appendix, the showerhead complies with the design requirement.

8. Appendix T to subpart B of part 430 is amended by adding a note after the heading and revising sections 2 and 3, to read as follows:

APPENDIX T TO SUBPART B OF PART 430--UNIFORM TEST METHOD FOR MEASURING THE WATER CONSUMPTION OF WATER CLOSETS AND URINALS

Note: Any representation related to water consumption of water closets or urinals made after [insert date 180 days after date of publication of faucets and showerheads test procedure final rule] must be made based upon results generated using this test procedure. Any representation related to water consumption of water closets or urinals made between [insert date

30 days after date of publication of water closets and urinals test procedure final rule] and [insert date 180 days after date of publication of water closets and urinals test procedure final rule] must be based upon results generated either under this test procedure or upon the test procedure as it appeared at 10 CFR part 430, subpart B, appendix T, as contained in the 10 CFR parts 200 to 499 edition revised as of January 1, 2012.

* * * * *

2. Test Apparatus and General Instructions

a. The test apparatus and instructions for testing water closets shall conform to the requirements specified in section 7.1, "General," in sections 7.1.1, 7.1.2, 7.1.3, 7.1.4, and 7.1.5 of ASME A112.19.2 (incorporated by reference, see §430.3). Measurements shall be recorded at the resolution of the test instrumentation. Calculations of water consumption for each tested unit shall be rounded off to the same number of significant digits as the previous step.

b. The test apparatus and instructions for testing urinals shall conform to the requirements specified in section 8.2, "Test Apparatus and General Instructions," of ASME A112.19.2-2008 (incorporated by reference, see §430.3). Measurements shall be recorded at the resolution of the test instrumentation. Calculations of water consumption for each tested unit shall be rounded off to the same number of significant digits as the previous step.

3. Test Measurement

a. Water closets:

(i) Measurement of water flush volume: The measurement of the water flush volume for water closets, expressed in gallons per flush (gpf) or liters per flush (Lpf), shall be conducted in accordance with the test requirements specified in section 7.4, "Water Consumption Test," of ASME A112.19.2 (incorporated by reference, see §430.3).

(ii) Static pressure requirements: The water consumption tests of siphonic and blowout water closets shall be conducted at two static pressures. For flushometer valve water closets with a siphonic bowl, the test pressures shall be 80 psi and 35 psi. For flushometer valve water closets with a blowout bowl, the test pressures shall be 80 psi and 45 psi. The test shall be run three times at each pressure as specified in section 7.4.3, "Procedure," of ASME A112.19.2 (incorporated by reference, see §430.3).

(iii) Flush volume and tank trim component adjustments: For gravity flush tank water closets, trim components that can be adjusted to cause an increase in flush volume, including (but not limited to) the flapper valve, fill valve, and float, shall be set in accordance with the printed installation instructions supplied by the manufacturer. If the installation instructions for the model to be tested do not specify trim setting adjustments, these trim components shall be adjusted to the maximum water use setting so that the maximum flush volume is produced without causing the water closet to malfunction or leak. The water level in the tank shall be set to the maximum water line designated in the printed installation instructions supplied by the manufacturer or the designated water line on the tank itself, whichever is higher. If the printed installation instructions or the water closet tank do not indicate a water level, the water level shall be adjusted to 1 ± 0.1 inches below the top of the overflow tube or 1 ± 0.1 inches below the top rim of the water containing vessel (for gravity flush tank water closets that do not contain an overflow tube) for each designated pressure specified in Table 5 of ASME A112.19.2 (incorporated by reference, see §430.3).

[FR Doc. 2013-08073 Filed 04/05/2013 at 8:45 am; Publication Date: 04/08/2013]